

REMARKS

In the Office Action, claims 1-5 were rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 6,313,178 (US '178) by itself or in combination with U.S. Patent No. 6,183,763 (US '763). The Applicants have amended claims 1 and 4 to more clearly distinguish the claimed invention. Specifically, claims 1 and 4 have been amended to define the surface layer as being "moisture absorbent, dry". These limitations have a basis at page 9, lines 10-15 and page 10, lines 1-6 of the specification as originally filed. Also, the limitations of former claim 5 have been incorporated into claim 4, and claim 5 has been cancelled accordingly.

It is respectfully submitted that US '178 fails to teach the use of hydrogenated lupulones or derivatives in the context of the present invention. While US '178 teaches topical administration of such compounds to the epidermis by ointments, creams, lotions, or patches, this purpose is dependent upon the delivery system being capable of penetrating each layer of skin. In other words, the hydrogenated lupulones or derivatives are delivered into the skin.

In contrast, the present claimed invention is directed to the inhibiting of bacterial growth in liquids in contact with a diaper. The tetrahydroiso-alpha acids and/or hexahydro-beta acids are incorporated into a moisture absorbent, dry surface layer of the diaper and therefore, are not dependent upon transdermal penetration. The topical ointments, creams and lotions taught in US '178 are far different from the moisture absorbent, dry tetrahydroiso-alpha acid and/or hexahydro-beta acid treated surface layer used in the present invention to inhibit bacterial growth. While the transdermal patches taught in US '178 are more closely related to a diaper, such patches would fail

when contacted with the volume of liquids encountered in a diaper. This is apparent from column 7, lines 16-22 of US '178 which notes that transdermal patches fail under excessive skin moisture.

Thus, US '178 teaches moist antimicrobial delivery systems such as topical ointments, creams and lotions which clearly do not suggest a moisture absorbent, dry surface layer antimicrobial delivery system as in the claimed invention. US '178 also teaches patch antimicrobial delivery systems that would fail in the applications claimed by the Applicant. In this regard, it is well settled that "if proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification" (see M.P.E.P. § 2143.01 citing *In re Gordon*, 733 F.2d 900, 221 USPQ 1125, Fed. Cir., 1984). Therefore, nothing in US '178 would teach or suggest a moisture absorbent, dry surface layer antimicrobial delivery system as in the claimed invention.

US '763 relates to antimicrobial wipes having a cleansing composition that may include hop oils. The cleansing composition comprises 3% to 98% water (see column 15, lines 57-61). Therefore, these moist antimicrobial delivery systems do not suggest a moisture absorbent, dry surface layer antimicrobial delivery system as in the claimed invention. Accordingly, US '763 does not make up for the deficiencies in US '178 as discussed above.

Conclusion

Therefore, it is submitted that amended claims 1 and 4, and claims 2-3 that depend thereon, are in condition for allowance. Favorable reconsideration is respectfully requested.

A fee sheet is attached for the one month extension. No additional fees are believed to be needed for this amendment. However, if additional fees are needed, please charge them to Deposit Account No. 17-0055.

Respectfully submitted,

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